

Joint ARB and Cal/OSHA Interim Retrofit Visibility Policy

In July 2007, The Air Resources Board (ARB) adopted the in-use off-road diesel vehicle regulation (the regulation). The regulation will affect the hundreds of thousands of off-road diesel vehicles in the State and is expected to provide significant health benefits, including preventing approximately 4,000 premature deaths. The regulation requires affected fleets to accelerate turnover to cleaner, newer vehicles and to install exhaust retrofits intended to capture toxic diesel particulate matter (PM).

The first compliance date for large fleets is March 1, 2010. Large fleets without sufficient early credits to satisfy the regulation's first year requirements will need to install exhaust retrofits on some of their vehicles. The maximum retrofit requirement any fleet could be subject to in 2010 is to apply exhaust retrofits to 20 percent of their horsepower.

As the regulation was being developed, stakeholders raised the concern that some exhaust retrofits could be installed so as to block visibility from off-road vehicles, thereby presenting a possible safety hazard. ARB staff recognizes that installation of new exhaust equipment that is larger or different in shape than the vehicle's original equipment has the potential to impair the vehicle operator's ability to see in front, to the sides, or to the rear of the vehicle, and this in turn can subject people working in the vicinity of the vehicle to the risk of being struck by the vehicle due to the operator's inability to see them. Therefore, the regulation provides an ongoing annual exemption for vehicles that cannot be retrofit safely under health and safety requirements adopted by the Occupational Safety and Health Standards Board (Standards Board) and enforced by the Division of Occupational Safety and Health (Cal/OSHA).

Existing Cal/OSHA regulations prohibit altering a vehicle such that the operator's view to the sides or the front is impaired, and Cal/OSHA and the Standards Board staff are currently in the process of doing the groundwork needed to adopt a regulation that will similarly prohibit impairing the operator's view to the rear of the vehicle. More data are needed to define in a quantitative sense the extent to which alterations to a vehicle impair the operator's ability to see people working nearby, and ARB will be working with Cal/OSHA and the Standards Board staff to address that issue in the coming months.

Over the past year, ARB staff has been working with the staffs of the Standards Board and Cal/OSHA to develop an objective, field friendly, and reproducible measurement protocol to serve as the indicator of when a vehicle should be exempted from retrofit requirements due to the impact of the retrofit on visibility. However, because the first compliance date for large fleets is rapidly approaching, the agencies are in agreement that fleets need guidance immediately to proceed with their first-year retrofits.

Hence, as an interim measure, ARB and Cal/OSHA will be operating on the principle that any obstruction of the operator's view that would be created by a retrofit is to be considered unacceptable. **To that end, ARB will exempt from the March 1, 2010 retrofit requirement any vehicle that cannot be retrofitted without impairing the operator's vision to the front, sides, or rear of the vehicle.** That is, any vehicle that cannot be retrofitted without masking the operator's existing visibility will be exempted from retrofit. As soon as possible, ARB will release further details regarding the process for applying for an exemption.

In the coming months, ARB, the Standards Board staff, and Cal/OSHA will also work together to examine the most common models of off-road diesel vehicles, and ARB will release guidance on whether, for each model, a retrofit can be installed safely or the vehicle should be exempted from retrofitting.

If a vehicle owner is currently in the process of attempting to retrofit a vehicle, and it appears the retrofit will result in obstructed visibility for the vehicle operator, ARB should be contacted to determine how to apply for an exemption. ARB staff members may consult with the retrofit installer and/or Cal/OSHA if they feel further inquiry is warranted before making a determination. ARB and Cal/OSHA will also prepare and release guidance regarding retrofits that have already been installed and pose visibility problems as soon as possible.